## **SECTION 736 - HIGHWAY AND SIGN LIGHTING**

## 736 - 2 - Materials

## 736 - 2.01 - Highway Lighting Materials

**(C) Lamps:** of the Standard Specifications is revised to read: All lamps shall be universal burning, clear, high pressure sodium mogul screw base type. Each lamp shall be clearly and permanently marked, giving the wattage, the American National Standards Institute (ANSI) specification number, manufacturer's name and the manufacturer's catalog item number.

Lamps of the type and wattage specified shall conform to the following:

Single Arc Tube Lamps -

<u>Wattage</u>	Lamp Voltage	Minimum Initial <u>Lumens</u>	Ave.Rated Life Hr.	ANSI <u>Spec. No.</u>
150	55	16,000	24,000+	S55
250	100	30,000	24,000+	S50
310	100	37,000	24,000+	S67
400	100	50,000	24,000+	S51

Dual Arc Tube Lamps -

<u>Wattage</u>	Lamp Voltage	Minimum Initial <u>Lumens</u>	Ave.Rated <u>Life Hr.</u>	ANSI <u>Spec. No.</u>
150	55	16,000	40,000+	S55
250	100	29,000	40,000+	S50VJ-250
400	100	50,000	40,000+	S51

The minimum initial lumens rating shall be derived after 100 hours of burning. The average rate life shall be determined per IES testing procedure LM-47. Lamp failure shall be defined as failure to light cycling, drastic color changes or significant reduction (more than 10%) in lumen output.

Dual (or twin) arc tube lamps shall be used on all horizontally mounted luminaires and Type II high mast luminaires.

## **736 - 3 - Construction Requirements:** is modified to add:

When twin arc tube lamps are used on luminaires (all horizontally mounted luminaires and Type II high mast luminaires) with horizontally mounted lamps, the twin arc tube lamp shall be installed in the luminaire so that the twin arc tubes are directly over each other on a vertical plane. A horizontal alignment of the arc tubes negatively impacts the optical performance of the luminaire.